

Quarterly Report

Agency/Organization: The Great Basin Institute

Project Name: BCCE Desert Tortoise Telemetry and Health Assessments – Year 2

Project Number: 2019-GBI-1930A

Reporting Period: 1 January – 31 March 2020

Project Contact Name and Information: Terry Christopher
7250 S Durango Drive Suite 130
PMB #263
Las Vegas, NV 89113
702-433-2600

QUESTION 1: What did you accomplish during this reporting period? How did these accomplishments help you reach the goal of your project? If relevant, what indicators or benchmarks were used to determine your progress?

This quarterly report documents Mojave desert tortoise telemetry surveys done by the Great Basin Institute (GBI) at the Boulder City Conservation Easement (BCCE). The Clark County Desert Conservation Program (DCP) and the U.S. Fish and Wildlife Service (USFWS) translocated Mojave desert tortoises (*Gopherus agassizii*) from the Desert Tortoise Conservation Center to the northeast portion of the BCCE. GBI was contracted by the DCP to conduct telemetry surveys to monitor resident and translocated tortoises in the BCCE. Initial telemetry monitoring began 6 October 2014, following translocation. This document provides information on telemetry surveys conducted 1 January – 31 March 2020 in Year 2 for project number 2019-GBI-1930A.

Telemetry was conducted on 48 animals, for a total of 277 observations. Surveys were conducted on 30 translocated tortoises and 18 resident tortoises affixed with semi-permanent transmitters. Data for this project were recorded with paper and electronic data collection units (Trimble Juno SB Handheld). Electronic data were downloaded into a Pendragon Forms database and then uploaded into a Microsoft Access database where they were verified, examined for errors, and corrected using automated QA/QC scripts and visual checks.

Project Goals and Objectives:

- Monitor tortoises for 5 years
- Acquire information regarding home range, settling rates, survival, and habitat use
- Conduct health assessment of tortoises

Objectives Completed this Quarter:

- Radio telemetry monitoring took place 1 January – 31 March 2020
- 48 telemetered tortoises were tracked (30 translocated and 18 resident)

QUESTION 2: What, if any, problems were encountered? Briefly describe those problems and the manner in which they were dealt.

No problems were encountered this quarter.

QUESTION 3: What, if any, proposed activities were not completed? Briefly describe those activities, the reasons they were not completed and your plans for carrying them out.

Project activities are on track at this time.

QUESTION 4: What is the calculated percent of work completed?

For this reporting period, project activities began 1 January 2020. Field work for this project is about 35% completed for year 2 at this time. More progress is expected in the next quarter, as telemetry monitoring continues.

QUESTION 5: Do you foresee any upcoming problems with future project activities? If so, how do you propose to overcome those problems?

No future problems are foreseen for upcoming project activities at this time.

QUESTION 6: Is there anything else you want to tell the DCP about this project?

Telemetered tortoises are monitored year-round using a VHF receiver and directional antenna. Location data is collected on each individual at least once monthly November through February, and weekly March through October. As batteries run out, transmitters will be replaced following USFWS protocol.

QUESTION 7: What was produced during the reporting period?

From 1 January – 31 March 2020, 18 resident and 30 translocated tortoises were monitored in the BCCE (Table 1). Telemetry was conducted over 21 days with 277 observations. Individuals were observed 5 to 8 times over the course of the reporting period. During the reporting period, the database was updated and looked over for quality control, and this report was produced.

Table 1. BCCE observations of tortoises by telemetry from 1 January – 31 March 2020.

Status	Tortoises Transmitted	Tortoises Deceased	Tortoises Missing	Number of Days	Total Observations	Average Observations per Day
Resident	18	0	0	21	104	5.0
Translocated	30	0	0	21	173	8.2
TOTAL	48	0	0	21	277	13.2

Please report on the status of each Milestone and Deliverable, indicate whether they are not started, in progress, or completed and provide comments on the status as necessary

Date Due	Deliverable/ Milestone #	Deliverable / Milestone Title	Completed
November 15, 2019	M01	Purchase Order Award	Yes
November 16, 2019	M02	Mobilization and Supply Order	Yes
November 30, 2019	D01	Monthly Data Upload	Yes
December 31, 2019	D02	Monthly Data Upload	Yes
January 05, 2020	D03	Quarterly Progress Report (Oct 1, 2019 – Dec 31, 2019)	Yes
January 29, 2020	D04	Monthly Data Upload	Yes
February 29, 2020	D05	Monthly Data Upload	Yes
March 31, 2020	D06	Monthly Data Upload	Yes
April 05, 2020	D07	Quarterly Progress Report (Jan 1, 2020 – Mar 31, 2020)	Yes
April 29, 2020	D08	Monthly Data Upload	
May 31, 2020	D09	Monthly Data Upload	
June 30, 2020	D10	Monthly Data Upload	
July 05, 2020	D11	Quarterly Progress Report (Apr 1, 2020 – June 30, 2020)	
July 29, 2020	D12	Monthly Data Upload	
August 31, 2020	D13	Monthly Data Upload	
August TBD, 2020	M03	Annual Project Review Presentation (If Requested)	
September 30, 2020	D14	Monthly Data Upload	
October 05, 2020	D15	Quarterly Progress Report (Jul 1, 2020 – Sept 30, 2020)	
October 28, 2020	M04	Debriefing Meeting	
October 28, 2020	D16	Annual Project Data	
October 28, 2020	D17	Annual Project Report	
November 14, 2020	N/A	Year 2 Close-Out	